

Substitute Form PTO-1449 (Modified)  <b>Information Disclosure Statement by Applicant</b> (Use several sheets if necessary)  (37 CFR §1.98(b))	U.S. Department of Commerce Patent and Trademark Office	Attorney Docket No. 17481-0004001	Application No. 09/207,649
		Applicant Susan Lindquist	
		Filing Date December 8, 1998	Group Art Unit 1649

**U.S. Patent Documents**

Examiner Initial	Desig. ID	Document Number	Publication Date	Patentee	Class	Subclass	Filing Date If Appropriate
	1	2001/0006793	07/05/2001	Bjornsti et al.			
	2	2002/0187157	12/12/2002	Jensen et al.			
	3	2003/0022243	01/30/2003	Kondejewski et al.			
	4	2003/0073610	04/17/2003	Lindquist et al.			
	5	2005/0009019	01/13/2005	Van Lueven et al.			
	6	2005/0064548	3/24/2005	Lindquist et al.			
	7	2006/0141449	06/29/2006	Lindquist et al.			
	8	2006/0147902	07/06/2006	Lindquist et al.			
	9	5,492,812	02/20/1996	Voohies, Paul			
	10	5,547,841	08/20/1996	Marotta et al.			
	11	5,643,562	07/01/1997	Kisilevsky et al.			
	12	5,652,092	07/29/1997	Vitek et al.			
	13	5,686,288	11/11/1997	MacDonald et al.			
	14	5,693,757	12/02/1997	MacDonald et al.			
	15	5,952,217	09/14/1999	Gorman et al.			
	16	5,958,721	09/28/1999	Marshall et al.			
	17	5,994,084	11/30/1999	Anderton et al.			
	18	6,071,694	06/06/2000	Takashima et al.			
	19	6,093,549	07/25/2000	Ross et al.			
	20	6,093,549	07/25/2000	Ross et al.			
	21	7,045,290	12/22/2005	Lindquist et al.			

**Foreign Patent Documents or Published Foreign Patent Applications**

Examiner Initial	Desig. ID	Document Number	Publication Date	Country or Patent Office	Class	Subclass	Translation	
							Yes	No
	22	1328814	10/11/2006	Europe				
	23	2001-501802	02/13/2001	JP				
	24	WO 01/02552	01/11/2001	WIPO				

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	25	WO 01/06989	02/01/2001	WIPO			Yes	No
	26	WO 01/23412	04/05/2001	WIPO				
	27	WO 02/065136	08/22/2002	WIPO				
	28	WO 02/35237	05/02/2002	WIPO				
	29	WO 05/005640	01/20/2005	WIPO				
	30	WO 91/04339	04/04/1991	WIPO				
	31	WO 91/05044	04/18/1991	WIPO				
	32	WO 93/03369	02/18/1993	WIPO				
	33	WO 99/06545	02/11/1999	WIPO				
	34	WO 99/62548	12/09/1999	WIPO				

### Other Documents (include Author, Title, Date, and Place of Publication)

Examiner Initial	Desig. ID	Document
	35	Adams et al., "Methods in Yeast Genetics," A Cold Spring Harbor Laboratory Course Manual, 1997.
	36	Andoh et al., "Yeast Glycogen Synthase Kinase 3 is Involved in Protein Degradation in Cooperation with Bul1, Bul2, and Rsp5," Moll. Cell. Biol., 20(18):6712-6720 (2000)
	37	Baumann et al., "Abnormal Alzheimer-Like Phosphorylation of Tau-Protein by Cyclin-Dependent Kinases cdk2 and cdk5," FEBS Lett., 336(3):417-424 (1993)
	38	Billingsley et al., "Regulated Phosphorylation and Dephosphorylation of Tau Protein: Effects on Microtubule Interaction, Intracellular Trafficking and Neurodegeneration," Biochem. J., 323:577-591 (1997)
	39	Borkovich et al., "hsp82 is an essential protein that is required in higher concentrations for growth of cells at higher temperatures," Mol Cell Biol. 9:3919-3930, 1989.
	40	Boucherie et al., "Differential synthesis of glyceraldehyde-3-phosphate dehydrogenase polypeptides in stressed yeast cells," FEMS Microbiol Lett., 125:127-133, 1995.
	41	Burke et al., "Huntingtin and DRPLA proteins selectively interact with the enzyme GAPDH," Nat Med. 2:347-350, 1996.
	42	Cafferty, Patrick W., "Characterization of Glycogen Synthase Kinase 3 Beta and Tau Interaction," Dept. of Neurology and Neurosurgery, McGill University (2000)
	43	Chai et al., "Analysis of the role of heat shock protein (Hsp) molecular chaperones in polyglutamine disease," J Neurosci., 19:10338-10347, 1999.
	44	Chai et al., "Evidence for proteasome involvement in polyglutamine disease: localization to nuclear inclusions in SCA3/MJD and suppression of polyglutamine aggregation in vitro," Hum Mol Genet., 8:673-682, 1999.
	45	Chen and Hochstrasser, "Biogenesis, structure and function of the yeast 20S proteasome," Embo J., 14:2620-2630, 1995.
	46	Cooper et al., "α-Synuclein Blocks ER-Golgi Traffic and Rab 1 Rescues Neuron Loss in Parkinson's Models," Science, 313:324-328 (2006)

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	47	Crauwels et al., "The Sch9 Protein Kinase in the Yeast <i>Saccharomyces cerevisiae</i> Controls cAPK Activity and is Required for Nitrogen Activation of the Fermentable-Growth-Medium-Induced (FGM) Pathway," <i>Microbiology</i> , 143:2627-2637 (1997)
	48	Cummings et al., "Chaperone suppression of aggregation and altered subcellular proteasome localization imply protein misfolding in SCA1," <i>Nat Genet.</i> , 19:148-154, 1998.
	49	DeMarini et al., "The yeast SEN3 gene encodes a regulatory subunit of the 26S proteasome complex required for ubiquitin-dependent protein degradation in vivo," <i>Mol Cell Biol.</i> , 15:6311-6321, 1995.
	50	Engelender et al., "Synphilin-1 associates with $\alpha$ -synuclein and promotes the formation of cytosolic inclusions," <i>Nature Genetics</i> , 22:110-114 (1999)
	51	Escher et al., "Taking Yeast from the Brewery to Drug Discovery," <i>Chimia</i> , 54(4):171-173 (2000)
	52	Gething, Guidebook to molecular chaperones and protein folding catalysts. Oxford University Press, 1997.
	53	Geyskens et al., "Expression of Mammalian PKB Partially Complements Deletion of the Yeast Protein Kinase Sch9," <i>NATO Science Series</i> , A316:117-126 (2000)
	54	Hartley et al., "The Yak1 Protein Kinase of <i>Saccharomyces Cerevisiae</i> Moderates Thermotolerance and Inhibits Growth by an Sch9 Protein Kinase-Independent Mechanism," <i>Genetics</i> , 136:465-474 (1994)
	55	Huang et al., "Mammalian Cdk5 is a Functional Homologue of the Budding Yeast Pho85 Cyclin-Dependent Protein Kinase," <i>Proc. Natl. Acad. Sci. USA</i> , 96(25):14445-14450 (1999)
	56	Jana et al., "Polyglutamine length-dependent interaction of Hsp40 and Hsp70 family chaperones with truncated N-terminal huntingtin: their role in suppression of aggregation and cellular toxicity," <i>Hum Mol Genet.</i> , 9(13):2009-2018, 2000.
	57	Kazantsev et al., "Insoluble detergent-resistant aggregates form between pathological and nonpathological lengths of polyglutamine in mammalian cells," <i>Proc Natl Acad Sci U.S.A.</i> , 96: 11404-11409, 1999.
	58	Kilmartin et al., "Structural Rearrangements of Tubulin and Actin During the Cell Cycle of the Yeast <i>Saccharomyces</i> ," <i>J. Cell Biol.</i> , 98:922-933 (1984)
	59	Kimura et al., "Role of the protein chaperone YDJ1 in establishing Hsp90-mediated signal transduction pathways," <i>Science</i> , 268:1362-1365, 1995.
	60	Koo et al., "Amyloid diseases: Abnormal protein aggregation in neurodegeneration," <i>PNAS</i> 96:9989-9990, 1999.
	61	Krobitsch and Lindquist, "Aggregation of huntingtin in yeast varies with the length of the polyglutamine expansion and the expression of chaperone proteins," <i>Proc Natl Acad Sci U.S.A.</i> , 97(4):1589-1594, 2000.
	62	Lindquist, Susan, "Yeast as a Model System for Studying Parkinson's Disease," Grant No. 1R21NS044829-01, (Abstract Only) (2004)
	63	Liu et al., "Oligopeptide-Repeat Expansions Modulate 'Protein-Only' Inheritance in Yeast" <i>Nature</i> 400:573-576 (1999)
	64	Mawal-Dewan, "Phosphorylation of Tau Protein by Purified p34 <sup>cdc28</sup> and a Related Protein Kinase from Neurofilaments," <i>J. Biol. Chem.</i> , 267(27):19705-19709 (1992)
	65	Moore et al., "Triplet repeats form secondary structures that escape DNA repair in yeast," <i>Proc. Natl. Acad. Sci. U.S.A.</i> , 96:1504-1509, 1999.
	66	Muchowski et al., "Hsp70 and Hsp40 chaperones can inhibit self-assembly of polyglutamine proteins into amyloid-like fibrils," <i>Proc. Natl. Acad. Sci. USA</i> , 97:7841-7846, 2000.
	67	Mumberg et al., "Regulatable promoters of <i>Saccharomyces cerevisiae</i> : comparison of transcriptional activity and their use for heterologous expression," <i>Nucleic Acids Res.</i> 22:5767-5768, 1994.

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	68	Mumberg et al., "Yeast vectors for the controlled expression of heterologous proteins in different genetic backgrounds," <i>Gene</i> , 156:119-122, 1995.
	69	Nathan and Lindquist, "Mutational analysis of HspPO function: interactions with a steroid receptor and a protein kinase," <i>Mol Cell Biol</i> , 15:3917-3925, 1995.
	70	Nathan et al., "Identification of SSF1, CNS1, and HCH1 as multicopy suppressors of a <i>Saccharomyces cerevisiae</i> Hsp90 loss-of-function mutation," <i>Proc. Natl. Acad. Sci. U.S.A.</i> 96:1409-1414, 1999.
	71	Neystat et al., "Analysis of Synphilin-1 and Synuclein Interactions by Yeast Two-Hybrid $\beta$ -Galactosidase Liquid Assay," <i>Neuroscience Letters</i> , Vol. 325, 2002, pp. 119-123.
	72	Neystat et al., "Identification of alpha-synuclein interacting proteins in rat brain by yeast two-hybrid screen," <i>Database Biosis (Online)</i> , Biosciences Information Services, XP-002431841, Database Accession no. PREV200100070267, Society for Neuroscience Abstracts, 26:1-2.
	73	Notice of Opposition, filed by FoldRx Pharmaceuticals, Inc. against European Patent No. 1373529, January 22, 2009
	74	Notice of Opposition, filed by ReMYND NV against European Patent No. 1392849, October 02, 2008
	75	Ostrerova et al., "alpha-Synuclein shares physical and functional homology with 14-3-3 proteins," <i>J. Neuroscience</i> , 19(14):5782-5791(1999)
	76	Ostrerova-Golts et al., "The A53T alpha-Synuclein Mutation Increases Iron-Dependent Aggregation and Toxicity," <i>J. Neuroscience</i> , 20(16):6048-6054 (2000)
	77	Outeiro et al., "Yeast Cells Provide Insights into Alpha-Synuclein Biology and Pathobiology," <i>Science</i> , 302:1772-1775 (2003)
	78	Petko et al., "Hsp26 is not required for growth at high temperatures, nor for thermotolerance, spore development, or germination," <i>Cell</i> , 45:885-894, 1986.
	79	Pringle et al., "Staining of Bud Scars and Other Cell Wall Chitin with Calcofluor," <i>J. Meth. Enzym.</i> , 194:732 (1981)
	80	Proprietor's Observations to the European Patent Office on the Opposition filed by ReMynd NV against EP 1392849 B1, dated June 25, 2009
	81	Proprietor's Observations to the European Patent Office on the opposition filed by FoldRx against EP 1373529 B1, dated September 2, 2009
	82	Puziss et al., "MDS1, a Dosage Suppressor of an <i>mck1</i> Mutant, Encodes a Putative Yeast Homolog of Glycogen Synthase Kinase 3," <i>Molecular and Cellular Biology</i> , 14:831-839 (1994)
	83	Richardson et al., "Mouse Models of Alzheimer's Disease: A Quest for Plaques and Tangles," <i>ILAR Journal</i> , 43:89-99 (2002)
	84	Saudou et al., "Huntingtin acts in the nucleus to induce apoptosis but death does not correlate with the formation of intranuclear inclusions," <i>Cell</i> , 95:55-66, 1998.
	85	Schweitzer et al., "Destabilization of CAG trinucleotide repeat tracts by mismatch repair mutations in yeast," <i>Hum Mol Genet</i> , 6:349-355, 1997.
	86	Song et al., "Proteolytic Processing and Degradation of Human Presenilin-1 Expressed in Yeast," <i>Neuroscience Letters</i> , 282:65-68 (2000)
	87	Spillantini MG et al., <i>Nature</i> , 388:839-40, 1997.
	88	Stenoien et al., "Polyglutamine-expanded androgen receptors form aggregates that sequester heat shock proteins, proteasome components and SRC-1, and are suppressed by the HDJ-2 chaperone," <i>Hum Mol Genet</i> , 8:731-741, 1999.
	89	Stone and Craig, "Self-regulation of 70-kilodalton heat shock proteins in <i>Saccharomyces cerevisiae</i> ," <i>Mol Cell Biol</i> , 10:1622-1632, 1990.

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	90	Tanaka et al., "Inducible Expression of Mutant $\alpha$ -Synuclein Decreases Proteasome Activity and Increases Sensitivity to Mitochondria-Dependent Apoptosis," Human Molecular Genetics, 2001, Vol. 10, No. 9, pp. 919-926.
	91	Temussi et al., "From Alzheimer's to Huntington: why is a structural understanding so difficult," EMBO Journal 22(3):355-361, 2003.
	92	Thevelein, J.M., "Signal Transduction in Yeast," Yeast, 10:1753-1790 (1994)
	93	Vogel et al., "Heat-shock proteins Hsp104 and Hsp70 reactivate mRNA splicing after heat inactivation," Current Biology, 5:306-317, 1995.
	94	Vonsattel et al., "Neuropathological classification of huntington's disease," J Neuropathol Exp Neurol., 44:559-577, 1985
	95	Willingham et al., "Yeast Genes That Enhance the Toxicity of a Mutant Huntingtin Fragment or $\alpha$ -Synuclein," Science, 302:1769-1772 (2003)
	96	Woods et al., "The Kinase DYRK Phosphorylates Protein-Synthesis Initiation Factor eIF2B $\epsilon$ at Ser <sup>539</sup> and the Microtubule-Associated Protein tau at Thr <sup>112</sup> : Potential Role for DYRK as a Glycogen Synthase Kinase 3-Priming Kinase," Biochem. J., 355:609-615 (2001)
	97	Yamaguchi et al., "Preferential Labeling of Alzheimer Neurofibrillary Tangles with Antisera for Tau Protein Kinase (TPK) I/Glycogen Synthase Kinase-3 $\beta$ and Cyclin-Dependent Kinase 5, a component of TPK II," Acta Neuropathol., 92:232-241 (1996)
	98	Yan et al., "Membrane Receptors, Sensors and Transporters," Yeast, 18(S1):S273 (2001)
	99	Zhang et al., "Interaction of the E1A Oncoprotein with Yak1p, a Novel Regulator of Yeast Pseudohyphal Differentiation, and Related Mammalian Kinases," Molecular Biology of the Cell, 12:699-710 (2001)
	100	Zhou et al., "Pin1-Dependent Prolyl Isomerization Regulates Dephosphorylation of Cdc25C and Tau Proteins," Molecular Cell, 6:873-883 (2000)

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